Power Engineering and Engineering Thermophysics
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Editorial to the Inaugural Issue

Dear editors, reviewers, authors, readers, and other members of the whole scientific and professional community,

Welcome to this inaugural issue of Power Engineering and Engineering Thermophysics (PEET)!

On behalf of the editorial office, I am writing with great pleasure and sincere privilege to present the first issue of the journal PEET.

In the first issue of PEET, we have collected a fascinating set of articles that bring together top-quality research across the entire spectrum of power engineering and engineering thermophysics. Accordingly, this issue is organized into seven articles. In the following a short description of each of the manuscripts follows.

Article 1 realizes continuous, high efficiency defrosting of air-to-air heat pumps using the effect of outdoor warm air recycling, trying to improve the coefficient of performance (COP) and total heat capacity of traditional defrosting methods like hot bypass and Joule heating.

Article 2 resorts to bilinear and bicubic interpolations, along with the spatial transform of images, to present the temperature distribution on a plate with a circular hole.

Article 3 establishes a distributed parameter model of the nonlinear bi-stable cantilever piezoelectric energy harvester, following the generalized Hamilton variational principle, and the geometric nonlinearity of the piezoelectric cantilever beam.

Article 4 presents an overview of recent advancements of liquid-solid fluidized beds in inclined columns. The fluidized bed is investigated as a whole by looking at the governing factors.

Article 5 puts forward a capacity optimization configuration for non-grid-connected wind-hydrogen hybrid energy storage system, in view of the features of hydrogen production efficiency, and optimizes the working interval of the electrolytic cell by analyzing the said features

Article 6 sets up two control strategies, namely, the strategy to control the ST of system operations, and the strategy to control the WBTD. Then, theoretical modeling was carried out to compare the system energy consumption and borehole wall temperature under different strategies.

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